3.5 <u>Hazards and Hazardous Materials</u>

The Peaceful Valley Ranch project is subject to evaluation for onsite conditions that may represent hazards with respect to human health and safety. The project site is located in an area of San Diego County that is susceptible to wildfire. In addition, the proposed project includes two equestrian use areas, one private and one public. The keeping of animals (horses) onsite brings with it the potential for health hazards to occur with regards to animal waste and insect management.

In addition, as the property has historically been utilized to support agricultural operations, hazards resulting from exposure to chemicals or fertilizers, as well as abandoned farming equipment and other gasoline-powered machinery, may represent a potential significant risk to human health. These issues are discussed herein as they relate to the project design and the potential for significant impacts to occur.

3.5.1 Existing Conditions

The subject property has been farmed for over 40 years and supports little native vegetation. Approximately 121 acres of the property are currently either in agricultural production or are developed or disturbed, with approximately three acres supporting various wetland and woodland habitat and the remaining 57 acres generally consisting of coastal sage scrub, southern mixed chaparral, and non-native grassland vegetation communities. These habitat communities connect to other native habitat communities to the north, east, and south of the subject site. Land uses on surrounding properties are generally rural residential, along with open space lands. Equestrian uses on individual lots are common and characteristic of the area surrounding the project site.

3.5.1.1 Risk of Wildfire

In 2003, the eastern front of the Otay wildfire burned to within ¼-mile of the western boundary of the property. The Otay wildfire, in conjunction with the simultaneous Cedar and Paradise wildfires of 2003, burned an area of 375,000 acres in the County, destroying over 2,400 structures and killing 16 people. The Otay wildfire was contained at 51,000 acres, with no structural losses or deaths. Prior to the Otay wildfire, the last significant wildfire in the area was the Proctor Valley Wildfire of 1999, in which over 1,200 acres were burned, with no structures lost and no loss of life.

The project site is located in an area where wildfire is prevalent, and therefore addressing vegetation management is required to reduce such risk, particularly by introducing primarily native California shrubs and trees to produce a drought-tolerant, fire-resistive landscape. In addition, the area surrounding the project site is subject to severe weather extremes that directly affect the potential flammability of the native vegetation. Elevated air temperature episodes (above 105°F in the summer months) and high wind velocity episodes (above 40 miles per hour [mph] from the north and northeast) are characteristic of the area in the fall and winter.

To the west of the subject property are largely undeveloped lands supporting natural vegetation. Although the risk of potential wildfire on these lands is high, the risk will be somewhat reduced in the future if the Jamul Indian Village Casino Development project

(proposed immediately west of the site) is developed, particularly if the project is designed with wildfire safety provisions in mind.

An additional wildfire threat is posed by the open space property owned and managed by the California Department of Fish & Game (CDF&G), immediately to the south of and adjacent to the property. While the vegetation on this property consists largely of native and non-native grasslands, as opposed to the higher-risk coastal sage scrub and chaparral vegetation communities, the ongoing fire management and control plans and practices of CDF&G are unknown.

The open space lands and patchwork of native vegetation along the eastern and northeastern boundaries of the subject property also pose a significant risk for the spread of wildfire. However, the presence of the Jamul Estates development to the east and southeast of the property somewhat mitigates the threat of wildfire. In addition, the majority of the lots within the Jamul Estates development have been landscaped and irrigated with ornamental plantings.

The northwestern corner of the project site includes a heavy fuel area, consisting of Diegan coastal sage scrub and southern mixed chaparral, which presents a potential risk for catastrophic wildfire. Diegan coastal sage scrub is also found in pockets along the northern, eastern, and southern boundaries of the project. Most of the site is dominated by agriculture (oats) or disturbed grassland, which present a less significant catastrophic wildfire risk.

The nearest existing Rural Fire Protection District (RFPD) fire station borders the property, on the west side of SR-94, immediately opposite Peaceful Valley Road, which presently provides access to the project site. The existing fire station facilities include a three-bay apparatus building of approximately 4,000 square feet (SF) and an administrative office of approximately 1,440 SF. RFPD houses a brush truck, fire engine, and rescue truck at the station.

As previously stated, a 3.7-acre lot (Lot 49) has been reserved within the proposed PVR development for a future joint-use fire station and administration offices for the RFPD and U.S. Fish and Wildlife Service (USFWS). The lot will be conveyed to the RFPD pursuant to a Fire Service Agreement entered into between the RFPD and Peaceful Valley Ranch LLC, owners of the subject property, and conditioned upon final approval of the Peaceful Valley Ranch development.

3.5.1.2 Equestrian Uses

The proposed public and private equestrian uses will result in the presence of horses onsite. Proper management of animal waste will be required to control potential hazards resulting from the breeding of insects (such as flies), as well as to control drainage to prevent offsite contamination of downstream waters. Measures for the storage and removal of animal waste, application of chemicals for insect and rodent control, minimizing the presence of open water onsite, general waste management education, and general sanitation practices will be required to reduce potentially significant hazardous conditions that may affect human health and safety, both onsite and offsite. Future operation and maintenance of the proposed equestrian facilities will require compliance with all local and state regulations, as well as conditions of the Major Use Permit (MUP) intended to regulate the private equestrian activities.

3.5.1.3 Hazardous Materials

The proposed Peaceful Valley Ranch site has historically been used to support agricultural operations. In January 2003, RBF performed a Phase I Environmental Site Assessment (ESA) the project site in accordance with American Society of Testing Materials (ASTM) Standard Practice E 1527-00. The ASTM E 1527-00 outlines a procedure for completing ESAs that include a review of records, site reconnaissance, and interviews where possible. The ESA is meant to evaluate the potential for hazardous materials onsite, based on present and historic uses of the property, and to characterize the expected nature of hazardous materials that may be present as a result of those uses. Refer to Appendix G-3 for a copy of the Phase I ESA.

At the time of the Phase I ESA, the subject site supported a debris pile, aboveground storage tanks, the area where the organic farm operated, and a small staging area for farming activities that included maintenance workshops, horse stables, a temporary greenhouse structure, a small shed, and a tractor staging area.

3.5.2 Guidelines for the Determination of Significance

Significance guidelines to define significant impacts from hazards or hazardous substances have been established. The guidelines were established in conjunction with Appendix G of the CEQA Guidelines and the County of San Diego's adopted ordinances and regulatory codes to ensure the guidelines are accurate and effective tools in determining impacts relating to hazards or hazardous substances. These guidelines have been included within these regulations because they have proven to be effective screening tools in determining impacts from hazards and hazardous substances. These guidelines are effective because they cover a range of possible scenarios where people, animals, the environment, or established regulations could be affected by hazards and hazardous wastes. For the purpose of evaluating potential impacts, a significant impact would occur if the project would:

- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands:
- Create a significant health hazard through reasonably foreseeable exposure of humans to hazardous conditions or a release of hazardous materials into the environment;
- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Conflict with the Peaceful Valley Ranch Wildfire Safety/Vegetation Management Master Plan; or,
- Conflict with the Peaceful Valley Ranch Animal Waste, Fly, and Vector Control Plan.

3.5.3 Analysis of Project Effects and Determination as to Significance

Wildfire Safety and Vegetation Management

A Wildfire Safety/Vegetation Management Master Plan (Master Plan) was prepared for the proposed project by Scott Franklin Consulting, an urban and wildland fire management consultant, in 2006. The *Master Plan* was prepared in consultation and cooperation with PVR LLC and other consultants, the RFPD, and the County Department of Planning and Land Use (DPLU); refer to Appendix G-1. The *Master Plan* was prepared to address and pursue mitigation of the threat of wildfire compliance with the 2001 California Uniform Fire Code Article 86, *Fire Protection Plan: Urban-Wildland Interface Areas*, and the requirements of the RFPD and DPLU.

The *Master Plan* addresses vegetation management, introducing primarily native California shrubs and trees to produce a drought-tolerant, fire-resistive landscape. Validation of these recommendations is based on the most recent historical catastrophic fire and weather history (Cedar Fire, October, 2003).

Catastrophic wildfires generally occur only under extreme weather and related fuel conditions. Wildfire poses a significant threat in the project site area, and development of the subject property could potentially expose people and structures to a significant risk of loss, injury, or death, involving wildland fire, including areas where residences are intermixed with wildlands.

Impacts would not be significant because the project would integrate design measures included in the *Master Plan*. These design measures would result in a project design that would avoid significant impacts. The following discussion summarizes the design measures proposed in the Master Plan to reduce potentially hazardous conditions resulting from the risk of wildfire. A detailed discussion of the proposed design measures is included in Appendix G-1.

BEHAVE PLUS Model

The *Master Plan* provides an analysis of the potential risk of wildfire and models wildfire conditions under extreme weather and fuel characteristics associated with eastern San Diego County, in order to identify potentially significant conditions. The BEHAVE PLUS 2.0 model was used to validate both wildfire risks and recommendations for future vegetation management. This model indicates how vegetative fuels burn under specific fuel, weather, and topography conditions. Thirteen fuel models (FMs) used in the BEHAVE PLUS 2.0 system, and are classified into four groups, based on fuel loading (tons/acre), fuel height, and surface-to-volume ratio. The differences in fire behavior among these four models are related to fuels (tons/acre) and their distribution among fuel particle size.

The location and positioning of fuels onsite were considered in modeling potential wildfire scenarios for the subject property. The following fuel groups are considered by the BEHAVE model:

- Grasses FMs 1 through 3
- Brush FMs 4 through 7
- Timber FMs 8 through 10

• Logging Slash – FMs 11 through 13

Two types of fuel moisture are considered in the BEHAVE model: dead fuel moisture and live fuel moisture. All vegetation is considered fuel. All vegetation will burn, but some requires a greater amount of heat in order to ignite and propagate flame (e.g., dry versus green grass). More than 90% of the flaming front of a wildfire is composed of fuel less than one-half inch in diameter, made up of smaller branches and leaves that generally fuel burn within minutes. Fuels larger than one inch in diameter are termed "residual" fuel and may require several hours to burn.

The BEHAVE model assumed the predominant ground cover for the proposed project to be coastal sage scrub and chaparral, combined with non-native grass, which are fuels that are highly volatile. San Diego County is subject to high wind conditions, particularly during the fall and early winter months. The greatest occurrence of Santa Ana wind episodes, as well as days of duration, occurs during November, while August has the fewest. Two fire/weather scenarios were employed for the project site to reflect (1) a catastrophic wildfire in the summer with high air temperature; and (2) a fall/winter scenario with lower air temperature, lower live fuel moisture, and elevated wind velocity. These models were prepared to illustrate how fire moves through fuels found both offsite and onsite. The following BEHAVE PLUS fire spread models serve as indicators of catastrophic wildfire potential of the project area, as well as the fuels located onsite.

In the model outputs, the spotting distance is considered to be the distance a burning branch, leaf, or twig will carry in a wind-driven fire. The ignition component is included in the model outputs and is an indicator of the flammability of the fuel, measured as a percentage. Out of 100 flying, burning branches or twigs, if 80 start a new fire downwind, the ignition component would be 80%. A probability of ignition above 60% is considered severe. The model outputs were as follows:

- 28 Lots are impacted by FM 3 –Tall Grass
- 2 Lots are impacted by FM 4 Southern mixed chaparral
- 21 Lots are impacted by FM 6 Diegan coastal sage scrub

Fuel Model 3 - Tall Grass 2-3 feet

Summer Fire Fall/Winter Fire

Rate of Spread: 229 ch/hour(hr)(3 mph) Rate of Spread: 555 ch/hr (7 mph)

Flame Length: 21 feet (ft) Flame Length: 31 ft

Spotting Distance: 0.8 miles Spotting Distance: 1.6 miles Probability of Ignition: 100 % Probability of Ignition: 100%

Fuel Model 6 - Diegan Coastal Sage Scrub

<u>Summer Fire</u> <u>Fall/Winter Fire</u>

Rate of spread: 66 ch/hr (1 mph)

Rate of Spread: 163 ch/hr (2 mph)

Flame Length: 9.5 ft Flame length: 14 ft

Spotting Distance: 0.4 miles
Probability of Ignition: 100 %

Spotting Distance: 0.9 miles
Probability of Ignition: 100 %

Fuel Model 4 - Mixed Southern California Chaparral

Summer Fire Fall/Winter Fire

Rate of Spread: 333 ch/hr (5 mph)

Rate of Spread: 982 ch/hr (12 mph)

Flame Length: 43 ft Flame Length 72 ft

Spotting Distance: 1.3 miles
Probability of Ignition: 100%

Spotting Distance: 2.9 miles
Probability of Ignition: 100%

Fuel Model 8 - Oak Understory/Chipped Biomass

Summer Fire Fall/Winter Fire

Rate of Spread: 5 ch/hr (0.06 mph)

Rate of Spread: 11 ch/hr (0.1 mph)

Flame Length: 1.8 ft Flame length: 2.6 ft

Spotting Distance: 0.1 miles
Probability of Ignition: 92%

Spotting Distance: 0.4 miles
Probability of Ignition: 100%

The result of these models indicates that between summer and fall, flame lengths are the result of high wind in the fall, and lower live and dead fuel moisture in the fall model. These model runs illustrate the high potential for significant hazardous conditions caused by wildfire to occur onsite and the need for effective vegetation management and structural design measures for fire control purposes.

Design Elements for Wildfire Prevention

To avoid potentially hazardous wildfire conditions and risks, the proposed project design includes a defensible space and vegetation management approach.

Fuel Management Zones (FMZs)

With the exception of Lots 29 (portion), 30, 31, 32, 33, 45 and 46, a 100-foot minimum fuel management zone (FMZ) would be required around each structure. The FMZ would extend out from each structure to ensure that vegetation around the structure is thinned and fire-retardant. The limits of the FMZ are dependent on where the pad of a future house is ultimately constructed. As specific building locations within each parcel are not known at this time, the FMZs shown in Figure 3.5-1 are measured from the edge of the proposed building pad and may vary from actual future conditions. These zones will provide space for fire suppression resources, as well as protect from flaming sparks and embers carried by strong winds. For Lots 30, 31, 32, and 33 and a portion of Lot 29, 150 feet of clearance along the northern and eastern sides of structures facing the steeper slope areas of the northern and eastern project boundaries will be required, due to the presence of heavy fuel. The fuel management zone will be reduced from 150 feet to 100 feet along the eastern boundary of Lot 29, approximately 225 feet north of the southern lot line, where the natural topography flattens. Lots 29, 32 and 33 will require 100 feet of clearance on the other exposures. Lots 30 and 31 will require 150 feet of clearance on all four sides of any structure.

In addition, on Lots 45 and 46, a reduced clearance of 30 feet will be provided along the northern side of the pads, adjacent to the Melody Road private drive, in conjunction with the requirement for enhanced building standards (as identified in Section 6B of the Wildfire Safety/Vegetation Management Master Plan). The fuel management zone along the west, south, and east sides of structures on Lots 45 and 46 will maintain the 100-foot clearance

standard. Additional design details regarding landscaping and irrigation within the fuel management zones are given in the Wildfire Safety Master Plan; refer to Figure 3.5-1.

In addition, 30 feet of clearing would be required adjacent to any proposed onsite roadway for fuel management purposes. As part of this requirement, removal of vegetation would be required adjacent to two onsite crossings where Peaceful Valley Road crosses the streambed in the central portion of the subject site and in the southeasterly portion where a driveway crosses the large drainage. Clearing and maintenance activities would be the responsibility of the homeowners' association.

Limited Building Zones

The proposed project design also includes onsite buffers or Limited Building Zones (LBZs) in areas where development abuts open space or adjacent property; refer to Figure 3.5-2. The LBZ differs from the proposed Fuel Management Zone in that it is intended to protect the dedicated open space areas and adjacent properties from encroachment as a result of fire clearing activities. The LBZ is a granted easement that precludes the development of structures requiring fire protection within 100 feet of open space or the property boundary (with the exception of Lots 29 [portion], 30, 31, 32, and 33 where the LBZ would be 150 feet). In addition, the LBZ for Lots 45 and 46 would be 30 feet, as the offsite property immediately adjacent to the north of these lots is presently landscaped with irrigated ornamental vegetation. The restrictions of the LBZ are in place to ensure that the fire clearing and thinning requirements of the FMZ do not encroach into areas preserved as open space.

Planting Within Fuel Management Zones

The *Master Plan* includes design elements aimed at landscaping and vegetation management to reduce the potential for significant hazards caused by the risk of wildfire. The applicant has prepared the Plan in cooperation with the RFPD, and has received approval of the Plan from the District. Through a formal agreement between the applicant and the District, proposed planting limitations given in the Plan would apply to each lot within the development, following approval of the Tentative Map. The following provides a brief summary of these design elements. Refer to Appendix G-1 for additional details.

Acceptable Plants

Certain shrubs and trees are recommended for general landscaping within the project fuel management zones. These plants are recommended because of their low level of flammability. These include Coastal live oak, California sycamore, cottonwood, willow, and California bay, among others. Additional plants considered to be acceptable for project landscaping are listed in the *Master Plan*; refer to Appendix G-1.

Prohibited Plants

The *Master Plan* also lists plants that will be prohibited from the fuel management zones because they are highly flammable and not drought-tolerant. Examples of these plants are pampas grass, cypress, eucalyptus, juniper, and pine. Additional prohibited plants are listed in the *Master Plan*; refer to Appendix G-1.

Trees Within Fuel Management Zones

Only the trees recommended in the *Master Plan* would be allowed within the fuel management zones. The Coast live oak and California sycamore are recommended, as both are native and highly fire-resistive. Additionally, homeowners would be required to keep trees free of dead branches and to cut off tree limbs up to four feet or 1/3 the height of the tree, whichever is greater from the ground, to reduce potentially significant impacts from wildfire.

Community Fuel Management Implementation Program

Fuel management standards are proposed for the project to provide a defensible space around all structures. It is anticipated that the homes at PVR will be built over time as custom or semi-custom homes. As such, the fuel management program is intended to protect the community as a whole from the risk of wildfire, regardless of the sequence of individual home construction. The Community Fuel Management Implementation Program allows any single structure to be constructed, while allowing the surrounding lots to remain vacant.

Site Planning and Design Standards

Roads and Driveways

The *Master Plan* also gives design standards for roadway and driveway design to further reduce impacts of wildfire. Proposed onsite private roads will provide adequate width to allow for both efficient evacuation of residents and incoming responding fire engines. All roadways will be designed and constructed to RFPD standards and approval. Other design elements for driveways, crossings, gates, roads, vertical clearance and maintenance of roadway landscaping are given in the *Master Plan* to allow efficient emergency circulation to and from the site, as well as to reduce the potential for fire to spread through the property.

Fire Protection Water System

Supply and Distribution System

The project would be served by the public water system with mains, hydrants, and stored water connections to the Otay Water District (OWD). The onsite public water system will consist of a gravity fed, looped system not dependent upon onsite pumps or electrical power. The onsite water supply and distribution system will be seismically engineered, complying with the National Fire Protection Association (NFPA) standards, including NFPA 13, 22, and 24, as well as the standards and requirements of the RFPD, OWD, and the American Waterworks Association.

Fire Flows

The water supply and distribution system for the project will provide a minimum of 2,500 gallons per minute (gpm) fire flow to all portions of the development for two hours at pressures required to supply fire sprinklers and provide 20 pounds per square inch of residual at hydrants during periods of peak domestic demand. This fire flow is based upon all residential structures having residential fire sprinkler systems. The *Master Plan* also specifies design elements relating to hydrant locations and capabilities, as well as water flow

requirements. All fire hydrants will comply with the standards of the RFPD, as well as the County Fire Code.

Safety Zones and Staging Areas

To further reduce the potential for wildfire, the project design includes utilizing the proposed private horse stable and training and polo field (Lot 51) and the fire station (Lot 49) as safety zones and staging areas whose purpose is to provide an area of safe refuge, if needed, as well as to serve as a staging area for fire fighting resources and deployment. Both of the safety zone and staging areas will be equipped with fire hydrants and public telephones.

Helipad

In addition, the polo field safety zone and staging area (Lot 51) will be provided with a helipad to serve the U.S. Forest Service, at a location and of a design to be approved by the RFPD. The pad shall be a minimum of 125 feet in diameter and will not be paved, but will be designed with a base material appropriate for the intended use.

Staging Area Maintenance

Maintenance of the staging area will be the responsibility of the operator of the equestrian facility (or lot owner). Maintenance will require that the polo field area be retained as a relatively level, properly mowed and healthy grassed field to ensure its continued use as a potential emergency staging area. The field will be maintained and remain available for use by the RFPD as a staging area regardless of whether the polo field use is implemented or not. Compliance with this provision will be assured by the rights of the RFPD to enforce the provisions of the *Master Plan* through legal enforcement of its rights under the Fire Service Agreement executed between the RFPD and the project developer.

Building Ignition and Fire Resistance Standards

Based on the risk assessment given in the *Master Plan*, vegetation management and ignition resistant construction are required for all onsite structures and appurtenances. As such, the Plan establishes fire protection standards that shall be applied to all development within PVR.

All structures built onsite will be subject to building design and construction requirements that include Basic (or Enhanced, for Lots 45 and 46) Fire-Resistive Construction Standards. These standards include guidelines for sprinkler systems, roof materials and construction, exterior wall surfacing, exterior glazing, skylights, fencing, venting, and protection of eaves. Smoke alarms and fire alarm bells will be required within each habitable structure onsite.

Construction Phase Activities

Design elements are given in the *Master Plan* to reduce the potential for wildfire during all phases of construction and to ensure compliance with all fire safety regulations. Design elements given in the *Master Plan* relate to installation and maintenance of all-weather access roads during all construction phases to the RFPD approval, ensuring that fire hydrants and water systems are operational at building sites before any combustible materials are stored at the building site, and coordination of all construction schedules and areas of work with the RFPD. Refer to the *Master Plan* (Appendix G-1) for additional information on

design elements that will apply to the development during construction to reduce the potential risk of wildfire.

Sheltering in Place

In addition to these design standards, the PVR project has been designed as a "shelter-in-place" development. Sheltering-in-place means staying inside a properly protected house or structure that is fire-resistive and airtight during a wildfire, and remaining there until the emergency is over. In communities that have incorporated this construction and landscaping features, "sheltering-in-place" is preferred by fire agencies over evacuation, due to the risks involved with evacuation. Of those who perish during large wildfires, history has shown that the majority of deaths occur during evacuation efforts. The principal design features incorporated into the *Master Plan* which allow PVR to be designated as a sheltering-in-place community are:

- Building design and construction standards incorporating:
 - Fire-resistive construction materials,
 - Class A noncombustible roofing and roof assembly,
 - Residential fire sprinklers throughout,
 - Boxed eaves,
 - Dual-pane or tempered glass windows,
 - Chimneys with spark arrestors incorporating a minimum ½" screening; and,
 - Appropriate venting restrictions;
- Landscaping design and construction standards incorporating:
 - Appropriate and adequate Fuel Management Zones protecting the community at large; and,
 - Fire-resistive landscaping materials and planting standards;
- Community planning standards incorporating:
 - Adequate roadway and driveway widths, able to accommodate large firefighting apparatus,
 - Adequate water supply for firefighting efforts,
 - Joint use RFPD / USFWS fire station onsite,
 - Safety zones for firefighting operations; and,
 - Helipad for fire fighting operations.

The PVR project will be required to conform to the design elements given in the *Master Plan* to reduce the potential risk of hazards caused by wildfire. These design elements will be applied during and subsequent to project implementation.

The design measures will be implemented through the Wildfire Safety/Vegetation Management Master Plan which is part of a formal signed agreement between the applicant and the RFPD. Annual inspections may be conducted by the RFPD or authorized wildfire

safety consultant to ensure compliance with the *Master Plan* standards. Prior to sale or occupancy of a property, each lot owner or resident will be provided with information specifically addressing wildfire safety, and will be required to acknowledge receipt and understanding of all wildfire safety provisions, including vegetation management. The applicant, as well as future lot owners, will be subject to compliance with all applicable requirements of the RFPD, the locally adopted fire code or building code, and all requirements or standards of any County, state, and federal fire safety regulations. All fire protections systems, access roads, and other development components will be designed, constructed, installed, and maintained in accordance with the standards of the *Master Plan*, fire code requirements, and the standards of the National Fire Protection Association (NFPA). Refer to the *Master Plan* for additional information on measures proposed to reduce the risk of wildfire.

Animal Waste, Fly, and Vector Control Plan

In addition to the 46 new residential estate lots, equestrian operations proposed for the PVR project include the boarding, breeding, training, and sale of specially trained horses. The equestrian facilities will consist of two separate and distinct horse specialty areas: hunter/jumper trained horses and polo horses. RBF Consulting prepared an *Animal Waste*, *Fly and Vector Control Plan* for the proposed project; refer to Appendix G-2. The *Animal Waste*, *Fly and Vector Control Plan* is aimed at:

- Safe disposal of animal waste resulting from equestrian uses onsite;
- Control of potential impacts caused by runoff through effective maintenance and stormwater practices;
- Control of the presence and reproduction of flies, mosquitoes, and rodents while minimizing the use of chemical agents; and,
- Control of odor-producing sources onsite.

Operation of the proposed equestrian facilities will require open water troughs, animal waste, and feed that could be a breeding ground for rodents and insects. Insects such as mosquitoes may potentially breed on open water onsite and carry the West Nile Virus or other diseases. Improper management of animal waste onsite may increase odors or unsanitary conditions that can foster the spread of disease. In addition, improperly disposed of animal waste may be carried offsite by stormwater and contaminate downstream water sources. For these reasons, operation of the equestrian facilities may be a significant health hazard resulting from the reasonably foreseeable exposure of humans to hazardous health conditions or release of hazardous materials into the environment. However, an *Animal Waste, Fly and Vector Control Plan* has been prepared which identifies project design elements which will become conditions of approval of the Major Use Permit for the private equestrian facility and which will be adhered to by the operators of the public equestrian facility on Lot 49 in conformance with the State of California Health and Safety Code Section 2060-2067. These project design elements are discussed below. Implementation of these project design elements will avoid significant impacts related to vectors.

The Vector Control Plan establishes design elements intended to control the storage and removal of animal waste, control the application of chemicals for insect and rodent control,

minimize the presence of open water onsite, and provide general waste management education, odor control, and general sanitation practices. As the *Vector Control Plan* is intended to serve as a guide for the operation and maintenance of the proposed equestrian facilities, its measures do not preclude, and are in addition to, compliance with all local and State regulations. The design elements given in the Plan are meant to be adhered to by both the operators of the equestrian facilities (Lots 48 and 51), as well as by visitors to the site, as applicable, to ensure human and animal health and safety, both onsite and offsite. The design elements of the Plan are briefly summarized below and listed in Chapter 8.0 of this EIR; refer to Appendix G-2.

General Maintenance

General facility maintenance will be provided by a staff of four (generally, one for public facilities, one for private, one to share duties of both, and one additional staff member to assist with trail maintenance). Additional staff may be employed as demand requires. Staff will be responsible for daily maintenance and cleaning of stalls, equestrian use areas, and trails. Owners will share in the responsibility for minimizing waste onsite, as proper etiquette reinforces owner responsibility to dispose of waste produced by his/her animal. Stalls within the enclosed barns will be lined with rubber mats covered with shavings over the concrete slab to allow for adequate drainage. Stalls within the partially enclosed facilities will be covered with shavings over dirt (no concrete slab).

Manure Management

Onsite manure management will include the storage, treatment, and removal of animal waste. One storage bin or dumpster will be located at both the public and private equestrian areas. The nearest house pad to any onsite manure management dumpster at the public equestrian facility (Lot 48), is approximately 130 feet northeast on Lot 46; however, this distance is to the edge of the pad and the future residential unit would likely be set back from the edge, further distancing the house from the dumpster. The nearest house pads to any onsite manure management dumpster at the private equestrian facility (Lot 51), are approximately 300 feet to the northeast on Lot 18 and 260 feet to the southeast on Lot 19. The dumpsters will be emptied two times per week (or more often, if needed). The dumpsters for the public and private equestrian facilities will be hauled offsite for proper disposal. Dumpster areas will be screened by a concrete block wall of adequate height to limit views. Storage bins will be rinsed out once per week (following manure removal) to minimize conditions that would support fly larvae.

Design elements given to reduce the potential for hazardous health conditions to occur guide the onsite storage and disposal of animal waste and include daily (at minimum) removal of manure and soiled bedding from stalls and corrals to onsite manure bins, changing unsoiled bedding within the stalls once weekly or as otherwise needed, and not storing manure onsite for a period exceeding five days. Refer to the *Vector Control Plan* for additional measures intended to reduce potential for hazardous impacts to occur as a result of animal waste onsite; refer to Appendix G-2.

General Water Management Methods

Project design elements are also given in the *Vector Control Plan* to guide appropriate management of onsite water sources associated with the equestrian facilities to minimize the potential for pests to breed onsite. Clean potable water will be provided within each horse stall via a self-dispensing mechanism. When the water level reaches a trigger point, the bin will refill itself. As a horse may drink an average of fifty gallons of water per day, water levels within the bins will typically not remain stagnant for long periods of time. As the water would be frequently consumed and replaced, the presence of standing water would be minimized.

Water will also be provided in 100-gallon bins at the proposed private and public facilities. These basins will be self-dispensing and will not be covered. However, the staff will monitor the tubs daily. Water within the tubs will be replaced once per week; however, as a total of 78 stalls (public and private facilities) are proposed with the project, water within the tubs would not remain stagnant and would frequently be consumed and replenished. If water within any onsite container were expected to remain stagnant for a period exceeding 72 hours (i.e. during periods of low use), the water would be removed and replaced by the operator of the facilities to minimize the potential for significant health hazards caused by vector breeding.

Design elements given in the *Vector Control Plan* for onsite water management include utilizing water-dispensing devices that have nonleak valves; ensuring proper drainage within stalls, corrals, and paddock areas to minimize the potential for ponding resulting from precipitation and/or spillage from water basins; and, prompt disposal of soiled bedding and/or manure and feed to minimize damp areas that may serve as breeding grounds.

Education

The project will include a signage program that will be implemented to educate users of the onsite equestrian facilities on the importance of manure management to reduce the potential for hazardous health conditions. Signage will be provided in such locations as the training and showing field and in the vicinity of the public and private equestrian facilities. Language will reinforce a horse owner's responsibility to pick up and properly dispose of any waste produced. As it is general etiquette among horse riders to be responsible for disposal of their horse's waste, large amounts of uncollected manure onsite are not anticipated.

A staff of four employees is anticipated for maintenance and operation of the equestrian facilities. The staff will be responsible for cleaning and maintaining of the horse stalls and bedding, wash rack areas, onsite trails, and other facilities. The staff will be fully trained and educated by the operator of the facilities in the proper removal of animal waste management and maintenance onsite. However, as all staff will likely have prior knowledge and experience working with horses, extensive training and/or education in the proper procedures are not anticipated. All staff will be responsible for adhering to the guidelines given in the *Vector Control Plan*.

Sanitary Methods

Basic sanitary methods for waste management will apply to the general day-to-day operation of equestrian uses to minimize the potential for pest or vector reproduction onsite. Elements

for water and wastewater management are given in the *Vector Control Plan* as general sanitary methods, including proper storage of onsite feed within enclosed tin or metal containers and prompt disposal of spilled or dampened feed around feed bins, minimizing the use of bedding (through use of rubber mats) within the enclosed stalls, and maintaining adequate drainage within all stalls and equestrian use areas to minimize dampness and promote drying. Refer to the *Vector Control Plan*, Appendix G-2, for additional details on sanitary methods.

Mosquito Control

Poor water quality and high levels of organic matter and/or nutrients, such as ammonia or nitrogen resulting from the presence of animal waste, can provide bacteria and algae used as food by mosquito larvae. The presence of mosquitoes on the project site may present a potentially significant hazardous condition with respect to human health. Water will be provided within the individual stalls and equestrian use areas; however, water is not anticipated to remain stagnant in any onsite water provision area for longer than 72 hours (due to the number of horses expected to be boarded at the site and the use of self-dispensing water facilities). Water that is frequently disturbed (e.g., by horses drinking from the source) does not generally promote mosquito egg-laying and can prevent the occurrence of immature mosquitoes.

Design elements aimed at controlling mosquito larvae and minimizing the potential for adult mosquitoes to breed onsite are given in the *Vector Control Plan*. Such measures include utilizing self-dispensing water devices with nonleak valves, minimizing the presence of standing water onsite, and maintaining adequate drainage within all stalls and equestrian areas (e.g., wash racks) to minimize the potential for the ponding of water. These measures will reduce the potential for hazardous conditions resulting from mosquito breeding onsite to less than significant.

Feed Storage

Feed will be provided for the horses boarded onsite and will consist of alfalfa and barley, which will be stored within enclosed structures onsite. One feed storage barn will be located at the public use area and one will be located at the private use area. Such structures will be capable of storing a double-load of hay (or less). Design measures intended to control the proper storage of feed onsite to minimize the presence or breeding of pests are given in the *Vector Control Plan* and include locating feed managers and bins away from onsite water sources, prompt cleanup of spilled and/or damp feed, and sheltering feed storage areas to prevent dampness or moisture from precipitation.

Rodent Control

General management practices given within the *Vector Control Plan* will minimize the potential for rodent occurrence and breeding onsite. Measures proposed for rodent control onsite include the use of rodent traps and/or bait within the stalls, feed storage areas, and equestrian use areas, locating feed storage within enclosed or sheltered structures and vector and rodent-proof containers to minimize rodent access to feed sources, and limiting application of chemicals within onsite feed storage and boarding areas. These measures will

reduce the potential for hazardous conditions resulting from rodent populations onsite to less than significant.

Long-Term Maintenance

Long-term maintenance onsite will include ongoing application and adherence to the design elements and maintenance guidelines included in the *Vector Control Plan*, or as otherwise appropriate. Long-term use of pesticides or other appropriate chemicals for pest control is expected to be minimal and, if necessary, will be applied by trained, licensed professionals. Best management practices (BMPs) and guidelines are given in the Plan to provide cost-effective use of the equestrian facilities onsite, thereby minimizing the requirement for high levels of maintenance. In addition, with the exception of individual horse riders being held responsible for onsite animal waste disposal, the operators of the facilities will be responsible for daily and long-term maintenance of the facilities and cleaning of equestrian use areas, including the horse stalls and boarding areas. Therefore, the frequency, level of quality, and thoroughness of maintenance of the facility will be ensured over the long-term.

To avoid potentially significant impacts resulting from hazardous conditions generated by the proposed equestrian uses, the proposed PVR project will be required to adhere to the design elements given in the *Animal Waste*, *Fly, and Vector Control Plan*. The proposed public equestrian activities are allowed by right under the existing A72 zone designation and would be regulated by County nuisance guidelines and standards for such issues as noise and odors, similar to existing equestrian activities on surrounding private properties. In the practice of good animal husbandry, and in conformance with Title 6, Division 2, Chapter 1 (Section 62) of the San Diego County Code of Regulatory Ordinances, appropriate management of the public equestrian facilities would minimize the potential for pests to breed onsite. Provisions of the *Animal Waste*, *Fly, and Vector Control Plan* prepared for the project would be considered design elements and shall be voluntarily adhered to by the operator of the public equestrian facilities. The design elements will become Conditions of Approval of the Major Use Permit for the private equestrian facility located on Lot 51 and will be adhered to by the operators of the public equestrian facility on Lot 49 in conformance with the State of California Health and Safety Code Section 2060-2067.

Phase I Environmental Site Assessment (ESA)

Several areas within the boundaries of the subject site were identified in the Phase I ESA as containing materials that are a potential source of a recognized environmental condition. These areas consist of former aboveground storage tanks (ASTs), one undocumented underground storage tank (UST), several 55-gallon drums, unsealed 5-gallon buckets (observed to contain waste oil), stained soils, abandoned vehicle equipment (old tractors), and miscellaneous debris.

Based on the records and other data reviewed during the preparation of the Phase I ESA, recommendations are given to reduce potential hazards on human health as the result of onsite conditions. The following recommendations were made in the Phase I ESA:

- Removal of all onsite miscellaneous vehicles and maintenance equipment, as well as onsite storage and debris areas;
- Soil sampling and analysis;

- Identification of the UST location;
- Removal and abandonment of water wells:
- An asbestos survey;
- A lead-based-paint survey; and,
- Removal of unknown wastes/suspect materials during demolition and construction.

The Phase I ESA identified two onsite areas where visible evidence of dark surface soil staining of oil/petroleum products was present (the onsite debris pile and tractor staging area). Onsite soil sampling was not performed during the Phase I ESA; however, additional analysis of these soils was performed in June 2006, as described below.

Additional Environmental Site Assessment

Underground Storage Tank (UST)

Based on the findings, conclusions, and recommendations of the RBF Phase I ESA, the County Department of Planning and Land Use (DPLU) requested additional site assessment regarding the presence of stained soils and the status of the UST at the site. Additional assessment of the site was conducted on June 5, 2006 by Kleinfelder, Inc. to determine the location of the UST. Limited excavation was performed to a depth of four feet below ground surface (bgs) in the vicinity of two protruding pipes and stained soils in front of the maintenance shop (Area 3); refer to Figure 3.5-3. These pipes were thought to be a possible vent and fill pipe for the UST. No visible evidence of a UST was observed during the excavation activities. Because it is possible that the UST, if present, may be located beneath the maintenance/work shop structure, additional efforts to locate the UST have been postponed until the maintenance/work shop structure is demolished.

Impact 3.5.3-1: As a result of the potential presence of a UST, the UST may represent the potential for a significant health hazard through reasonably foreseeable exposure of humans to hazardous conditions or a release of hazardous materials into the environment. This would be considered a significant impact.

Stained Soils

Stained soils onsite were tested in three areas of the site on August 3, 2006; two locations (A&B) in Area 1 and one location in Area 3.

In Area 1, two areas of stained soils were observed: one beneath a parked truck (Area A), and one beneath a parked piece of onsite machinery (Area B); refer to Figure 2 of Appendix G-4. One soil sample was taken from each area at a depth of approximately six inches bgs. Testing revealed total petroleum hydrocarbons (TPH) as gasoline and TPH as diesel were below the practical limit of 10 milligrams per kilograms (mg/kg). However, soils tested at Area B revealed TPH as heavy oil at a concentration of 1,090 mg/kg.

Soils in Areas A and B were also tested for arsenic and lead. Arsenic was determined to exceed U.S. EPA Region IX Preliminary Remediation Goals (PRGs) for Residential Soils in Area A; however, it is likely that as the sample concentrations were reported to be at the low end of the allowable range, arsenic in this soil is naturally occurring. Based on the results of

the soil sample analysis, the stained soil in Area A is not impacted by any of the compounds for which analysis was performed. Lead levels also exceeded the California-modified PRG in the soil sample taken in Area B. It was determined that these soils are impacted by petroleum hydrocarbons and lead. Kleinfelder estimated the lateral and vertical extent of the impacted soil to be approximately six feet by seven feet to a depth of two feet.

Impact 3.5.3-2: As a result of soils with petroleum hydrocarbons and lead levels exceeding PRG's, soils in Area A and B may represent the potential for a significant health hazard through reasonably foreseeable exposure of humans to hazardous conditions or a release of hazardous materials into the environment. This would be considered a significant impact.

In Area 3, to the north of Area 1, soils were sampled using a hand auger to explore subsurface soils beneath an area of staining to estimate the depth of impact; refer to Figure 3.5-3 and Figure 2 of Appendix G-4. The staining occurred beneath the former location of a tractor, which was moved by the owner to allow for assessment. Kleinfelder estimated that the extent of the impacted soil is approximately four feet in diameter and to a depth of two feet bgs.

Impact 3.5.3-3: As a result, petroleum hydrocarbon impacted soils in Area 3 may represent the potential for a significant health hazard through reasonably foreseeable exposure of humans to hazardous conditions or a release of hazardous materials into the environment. This would be considered a significant impact.

Wells

The DEH Land and Water Quality Division Land Use Program regulates the design, construction, maintenance and destruction of water wells throughout San Diego County to protect San Diego County's groundwater resources. The proposed project would destroy wells PV-1 and PV-3, and OW-1 through OW-9, following guidance measures for well destruction given in the DEH Site Assessment Manual. A cumulative flow meter would be installed at well PV-4 to record monthly water usage and the water level would be measured at wells PV-2, PV-4 and the proposed monitoring well (PV-6) on a monthly basis. Refer to Appendix F-1 for additional information pertaining to the water wells. The approval by DEH for removal of onsite wells is considered a project design element and will be required as a condition of the project. Therefore, no significant impacts are expected to occur with respect to the onsite wells.

Building Demolition

Demolition of the onsite structures would comply with regulations pertaining to the testing and/or removal of asbestos containing materials (ACMs) and lead-based paint (LBP). Abatement would be conducted on an as-needed basis to protect human health and the environment and to comply with all applicable federal, state, and local laws and regulations governing ACMs and LBPs. Prior to building demolition, lead based paint and asbestos surveys will be completed in accordance with applicable federal, state, and local laws governing ACMs and LBP. These surveys are considered a project design element and will be required as a condition of the project. Therefore, no significant impacts are expected to occur with respect to ACM or LBP.

Demolition and removal activities on the site will occur in accordance with the requirements of CEQA, ASTM standard practices, and pertinent Federal, State, and County policies. If unknown substances or materials are discovered during construction that are suspected to be hazardous, the contractor would be required to stop work immediately in the vicinity of the suspected contaminant and to notify the implementing agency's Hazardous Waste/Materials Coordinator.

All miscellaneous vehicles, equipment, construction and irrigation materials, ASTs, 55-gallon drums, and 5-gallon buckets will be demolished and/or removed and properly disposed of at an offsite location, prior to grading of the subject site. All miscellaneous storage and debris piles will also be removed from the site, consistent with applicable County procedures. The removal of miscellaneous storage and debris piles is considered a design element and will be required as a condition of the project. Therefore, no significant impacts are expected to occur with respect to debris onsite.

3.5.4 Cumulative Impact Analysis

No cumulative impacts were identified with respect to hazards or hazardous materials for the proposed project. The project has been designed to minimize the risk of wildland fire through project design measures and vegetation management. Through application and implementation of the design elements given in the Wildfire Safety/Vegetation Management Master Plan (and required as Conditions of Approval for MUP), the potential for the proposed development to contribute to an increased risk of wildfire in the project area will be minimized. Although the project site is in an area highly susceptible to the risk of wildfire, it has been designed utilizing a shelter-in-place approach, which applies fire-reducing landscaping measures, brush management zones, and requirements for building materials, thereby reducing its contribution to a cumulative wildfire risk. Application of shelter-in-place concepts for future development in the project area would similarly minimize potential cumulative impacts related to wildfire hazards.

In addition, the potential for the proposed project to contribute to cumulatively significant hazardous wildfire conditions in the area is further reduced through project design that includes utilizing the proposed private horse stable and training and polo field and the fire station lot as safety zones and staging areas. These areas would provide an area of safe refuge, if needed, as well as a staging area for firefighting resources and deployment of services for the surrounding area. In addition, the provision of the onsite helipad will also reduce the project's contribution by allowing the U.S. Forest Service a location from which fire protection services could be provided for the surrounding area and beyond. With these design measures, it is not anticipated that the proposed project will contribute to a cumulatively significant hazardous condition relative to wildfire hazards. Therefore, cumulative impacts are considered to be less than significant.

Design elements are also proposed to reduce the potential for significant hazards or hazardous conditions to occur as a result of the proposed equestrian activities. Equestrian uses on individual lots in the project area are common and could potentially cause a significant impact resulting from the cumulative presence of animal waste or breeding activities of disease vectors. However, the proposed project has been designed to reduce the potential for animal waste to be mismanaged or for runoff to adversely impact downstream waters. In addition, measures proposed for the onsite management of feed and open water

will reduce the potential for hazardous health conditions, such as the breeding of mosquitoes or other insects, to occur. Through implementation of the proposed design elements (to be implemented as Conditions of Approval of the MUP), the project is not anticipated to contribute to a cumulatively significant impact resulting from hazardous conditions, due to the onsite presence of animal waste and/or vectors. Therefore, cumulative impacts are considered to be less than significant.

3.5.5 Growth-Inducing Impacts

As discussed in Section 1.7 of this EIR, the proposed project would not result in growth-inducing impacts as a result of project implementation. The PVR development would not remove obstacles to population growth or encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively. Therefore, no growth-inducing impacts relating to hazards or hazardous materials would occur as a result of the proposed project.

3.5.6 Mitigation Measures

Potential UST in Area 3

3.5.3-1: Prior to the issuance of a grading permit, the applicant shall:

Excavate the area under the maintenance/workshop building for evidence of an underground storage tank (UST). If a UST is found, the removal of the UST shall be done under permit and inspection of the DEH, Underground Storage Tank Program.

The DEH removal process adequately mitigates potential impacts because the DEH requires soil samples to be taken as part of a UST removal to determine if contamination exists and requires remediation of contaminated soils if necessary. All UST removal will be completed in accordance with the requirements of the DEH site Assessment and Mitigation Program Manual.

Stained Soil Area in Area 1

3.5.3-2 Prior to the issuance of a grading permit, the applicant shall:

Prepare and execute a plan to remediate the area of stained soils in Areas A and B (within Area 1) to the satisfaction of the DEH Site Assessment and Mitigation Program. Remediation will generally include excavation of soils in Area A to a depth of approximately two feet below ground surface and excavation of an approximate six by seven foot area to the bottom of visible staining in Area B. Excavated soils would be placed in containers for characterization and offsite disposal in accordance with applicable regulations.

Stained Soil Area in Area 3

3.5.3-3 Prior to the issuance of a grading permit, the applicant shall:

Prepare and execute a plan to remediate the area of stained soils in Area 3 to the satisfaction of the DEH Site Assessment and Mitigation Program. Remediation will generally include excavation of an approximate six feet by six feet area of soils to a depth of approximately three feet. Excavated soils would be placed in containers for

characterization and offsite disposal in accordance with applicable regulations. A confirmatory sample of the excavated soil shall be collected from the bottom of the excavation and shall be analyzed for lead and TPH.

3.5.7 Conclusions

Peaceful Valley Ranch will be required to adhere to the design elements given in the Wildfire Safety/Vegetation Master Plan to reduce the potential risk for hazardous conditions caused by wildfire. The design measures will be implemented through the *Master Plan*, which serves as a formal signed agreement between the applicant and the RFPD. The applicant, as well as future lot owners, will be subject to compliance with all applicable requirements of the RFPD, the locally adopted fire code or building code, and all requirements or standards of any County, state, and federal fire safety regulations. Recommendations and requirements given in the *Master Plan* are subject to all legal, environmental, and resource laws and constraints. Proposed design elements will reduce the potential risk for wildfire hazards through addressing building material types, fire-resistant landscaping, and landscaping maintenance, as well as onsite roadway design and brush management zones. Project design elements given in the *Master Plan* will ensure that potential impacts resulting from the threat or hazards of wildfire remain less than significant.

To avoid the potential for significant health hazards as the result of operation of the equestrian facilities, implementation of maintenance measures and design elements given in the Animal Waste, Fly and Vector Control Plan will be required. The design elements included in the Vector Control Plan are meant to control onsite conditions that would favor pest occurrence or reproduction. The Vector Control Plan will minimize the potential for fly, insect, and/or rodent breeding for PVR through proper storage and disposal of animal waste produced onsite; proper drainage management (on and offsite) of water storage and water use areas; prompt and proper disposal of organic debris and other garbage generated by onsite users and homeowners; management techniques to minimize the use of chemicals for onsite pest control; and, general and ongoing public education of users of the facilities to minimize the presence of animal waste to communicate and reinforce proper methods of management and disposal. Project design elements given in the Animal Waste, Fly and Vector Control Plan will become Conditions of Approval of the MUP to ensure that potential impacts related to manure management and vector control remain less than significant. The proposed public equestrian activities are allowed by right under the existing A72 zone designation and would be regulated by County nuisance guidelines and standards for such issues as noise and odors, similar to existing equestrian activities on surrounding private properties. Code enforcement for the public equestrian activities will be the responsibility of the County.

The Phase I ESA identified several potential hazardous materials onsite, based on present and historic uses of the property. Evidence of a UST in Area 3 was identified onsite, however its exact location could not be identified. The UST was not located during the Phase I or the subsequent site assessment. It is believed that the UST is located beneath the maintenance storage shed in Area 3. Therefore, additional investigation will occur at the time when the ground under the maintenance/workshop building is excavated to determine the presence of the UST. Proposed mitigation would reduce impacts to less than significant.

Stained soils identified onsite in Areas 1 and 3 shall be analyzed for lead and TPH-Ext and the appropriate measures will be taken to reduce impacts to less than significant, in accordance with the requirements of the DEH Site Assessment and Mitigation Program.

The project has incorporated design elements to ensure that potential impacts as a result of abandoned wells, lead and asbestos materials, and miscellaneous storage and debris onsite will remain less than significant. Although the wells not proposed for use would be destroyed, this action is not considered to create a potential significant health hazard through reasonably foreseeable exposure of humans to hazardous conditions, as the wells would be abandoned and capped under permit from DEH. In addition, as stated above, all demolition and removal activities on the site would occur in accordance with the requirements of CEQA, ASTM standard practices, and pertinent Federal, State, and County policies. As a result, impacts resulting from the presence of hazards or hazardous materials onsite are considered to be less than significant.

The project includes design measures to require lead and asbestos surveys prior to building demolition to ensure that materials containing lead and asbestos are properly contained and disposed. This measure ensures that potential impacts from lead and asbestos remain less than significant.

The project requires that miscellaneous storage and debris piles onsite be removed prior to grading of the site. This design element ensures that potential impacts associated with debris onsite are removed prior to development. As such, potential impacts remain less than significant.

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PEACEFUL VALLEY RANCH FUEL MANAGEMENT ZONES

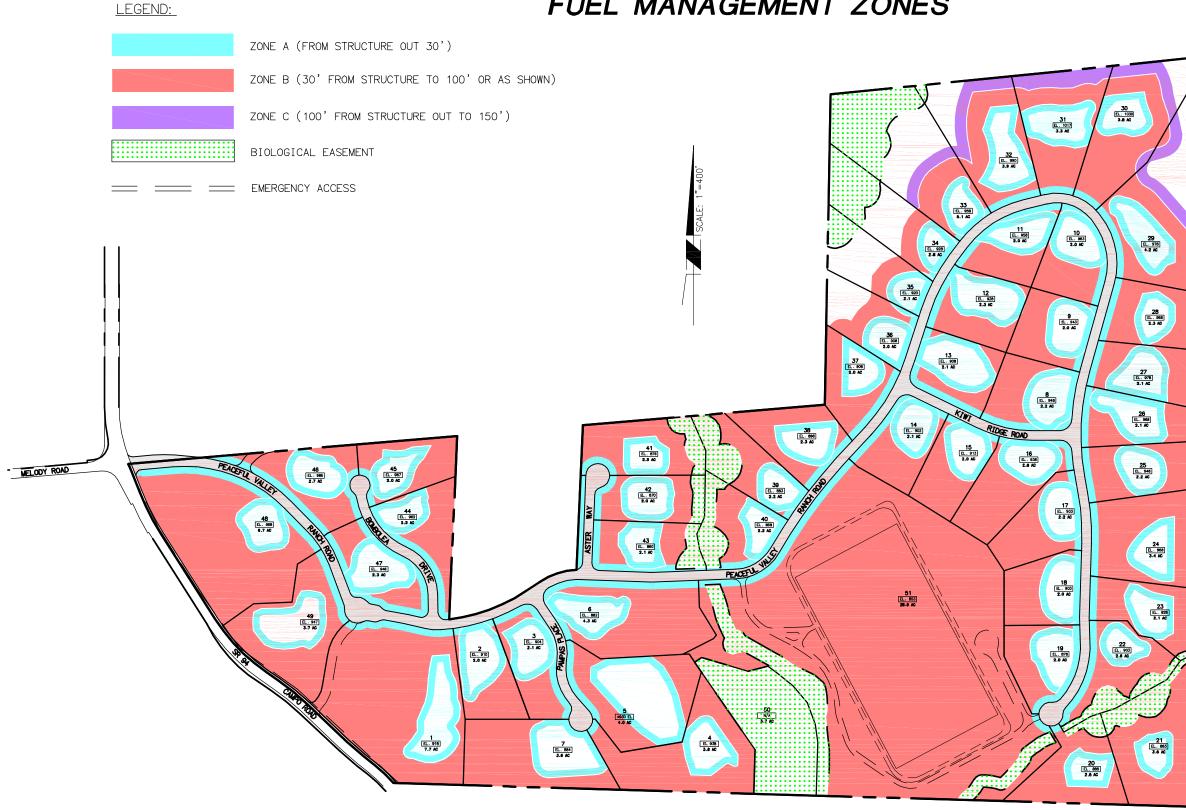


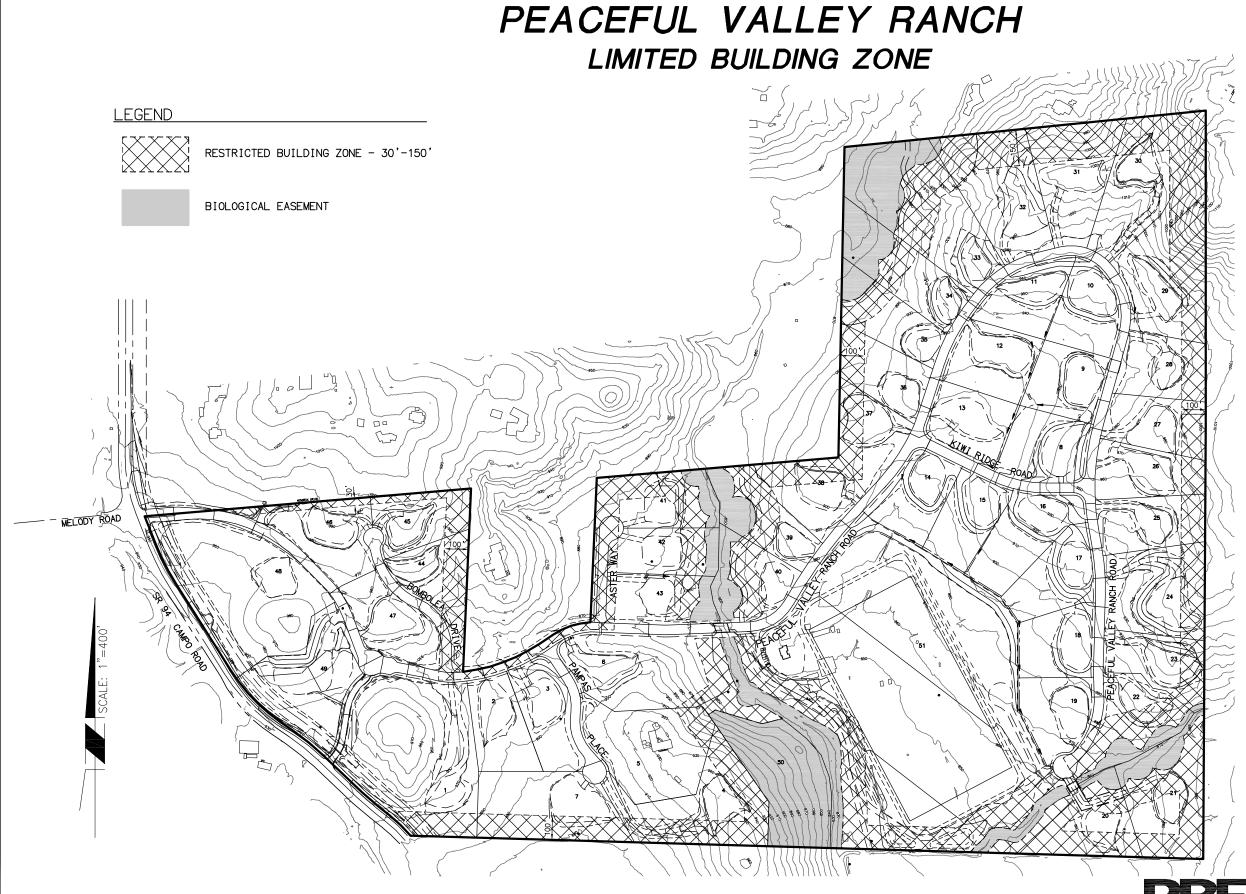
FIGURE 3.5-1
PEACEFUL VALLEY RANCH

RBF

PLANNING **B** DESIGN **B** CONSTRUCTION

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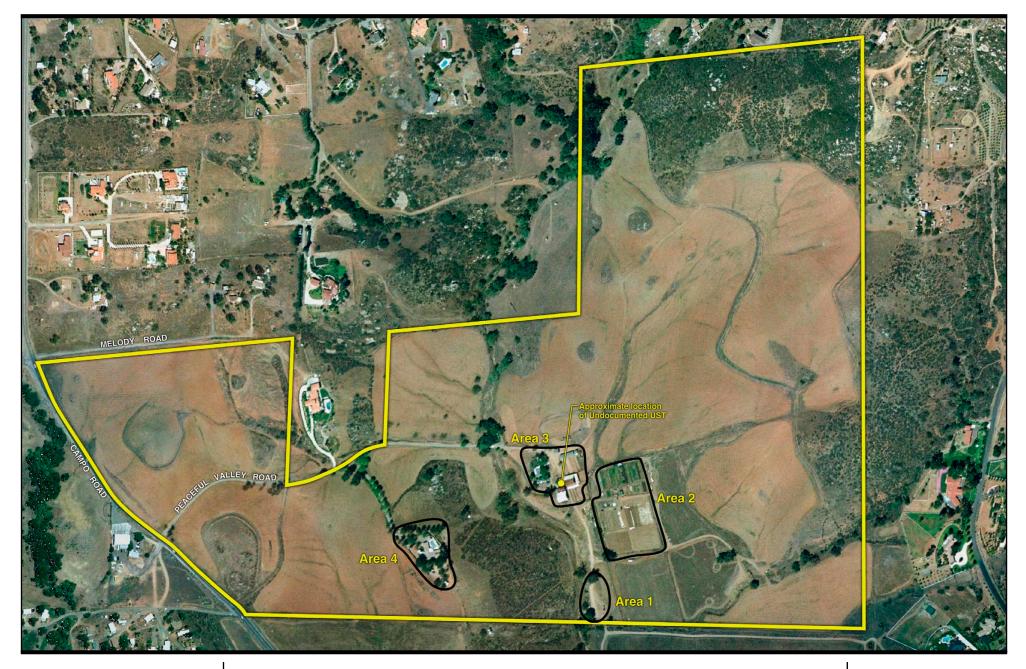
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Areas Evaluated for Hazardous Materials

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